

REMARKS

This Amendment is being filed in response to the Office Action mailed November 12, 2008, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-20 are pending in the application, where claims 10-14 had been previously added and claims 15-20 have been added by the present amendment. Claims 1, 8 and 15 are independent.

In the Office Action, claims 1-3, 5-6 and 8 are rejected under 35 U.S.C. §103(a) as over U.S. Patent No. 5,804,918 (Yazawa) in view of U.S. Patent No. 4,389,973 (Suntola). Claim 4 is rejected under 35 U.S.C. §103(a) over Yazawa in view of Suntola and U.S. Patent No. 6,117,529 (Leising). Claim 7 is rejected under 35 U.S.C. §103(a) over Yazawa and Suntola in view of U.S. Patent No. 5,003,221 (Shimizu). Further, claims 9-14 are rejected under 35 U.S.C. §103(a) over Yazawa and Suntola in view of U.S. Patent No. 5,294,870 (Tang). It is respectfully submitted that claims 1-20 are patentable over Yazawa, Suntola, Leising, Shimizu and Tang for at least the following reasons.

Yazawa is directed to an electroluminescent device having a multiple reflection layer comprising a lower refractive index insulating layer 31 and a higher refractive index insulating layer 32. As correctly noted by the Examiner on page 3, first full paragraph of the Office Action, Yazawa does not disclose or suggest that a stack of transparent dielectric layers includes a dielectric transparent layer having a high refractive index n adjoining an electrode. Rather, as shown in FIG 8 and recited on column 8, lines 52-55, the insulating layer 31 having the lower refractive index adjoins an electrode 4 in Yazawa. Suntola is cited in an attempt to remedy the deficiencies in Yazawa.

Suntola is directed to a method and an apparatus for performing growth of compound thin films using ALE (Atomic Layer Epitaxy) growth without vacuum deposition. Instead of using vacuum deposition techniques in performing the ALE growth method, the Suntola ALE growth method uses gas phase diffusion barriers in order to separate single surface reaction steps.

At the outset, it is respectfully requested that the combination of Yazawa and Suntola is not proper, as they are directed to different technologies. In particular, Yazawa is

directed to an electroluminescent device while Suntola is directed to ALE growth. There is simply no motivation for one skilled in the art of displays to combine the Yazawa electroluminescent device with the Suntola ALE growth method.

Assuming, arguendo, that the combination of Yazawa and Suntola is proper, FIG 15 and column 11, lines 36-43 of Suntola merely disclose that two insulating films 102, 104 are formed between a ZnS(Mn) film 103. Electrodes 101, 105 adjoin the insulating films 102, 104. As specifically recited on column 11, lines 31 and 39-42, the two insulating films 102, 104 are exactly the same material, namely, Ta₂O₅. Thus, Suntola is completely silent about any stack of alternating layers of high and low refractive indices.

It is respectfully submitted that Yazawa, Suntola, and combination thereof, do not disclose or suggest the present invention as recited in independent claim 1, and similarly recited in independent claims 8 and 15 which, amongst other patentable elements, recites (illustrative emphasis provided):

said transparent dielectric layers having a high refractive index n being arranged in alternating manner with said transparent dielectric layers having a low refractive index n ,

said stack of $2n + 1$ transparent dielectric layers being arranged adjacent to one of the electrodes and including a dielectric transparent layer having a high refractive index n adjoining said electrode.


A stack of alternating transparent dielectric layers of high and low refractive indices, where the layer having the high refractive index n adjoins an electrode, is nowhere disclosed or suggested in Yazawa and Suntola, alone or in combination. Rather, the combination of Yazawa and Suntola discloses forming a layer having a low refractive index adjoining an electrode as disclosed by Yazawa, and forming the layers of the same material (Ta_2O_5) separated by a further material ($\text{ZnS}(\text{Mn})$) as disclosed by Suntola. Leising, Shimizu and Tang are cited to allegedly show other features and do not remedy the deficiencies of Yazawa and Suntola.

Accordingly, it is respectfully submitted that independent claims 1, 8 and 15 allowable. In addition, claims 2-7 and 9-20 are allowable at least because they depend from independent claims 1, 8 and 15 as well as for the separately patentable elements contained in each of the dependent claims.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

By 

Dicran Halajian, Reg. 39,703
Attorney for Applicant(s)
February 9, 2009

THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101